

## METHODS OF DIAGNOSING MUSCLE DAMAGE

### Abstract of the Disclosure

5 A method for assessing muscle damage in a biological sample obtained from a subject is disclosed. The method involves obtaining a biological sample from a subject being assessed for muscle damage, and evaluating the sample for the presence or absence of a myofilament protein modification product. Preferably, the myofilament protein modification product is a chemical adduct of a myofilament protein. The method can also be used to assess the extent and/or type of  
10 muscle damage in a subject by studying the profile of myofilament protein modification products detected in the sample taken from the subject. The invention further provides a method for screening for an agent which modulates the level of a myofilament protein modification product present in a biological sample or for a calcium sensitizing agent. The invention is applicable to cardiac muscle and skeletal muscle.